

An update on the LUX-ZEPLIN (LZ) experiment's search for dark matter

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The LUX-ZEPLIN (LZ) experiment is actively collecting physics data in the search for WIMP dark matter and other novel physics interactions nearly a mile underground at the Sanford Underground Research Facility. LZ achieves an unprecedented sensitivity for discovering WIMP-nucleon interactions by employing a low-background, 7-tonne liquid xenon time-projection chamber surrounded by a three-component veto system: a liquid-xenon skin, a nearly-hermetic Gd-loaded liquid scintillator, and an instrumented tank of ultra-pure water. In this talk I will present the status of the LZ experiment and its search for WIMP dark matter and other new physics phenomena.

Relatore: OLCINA, Ibles

Classifica Sessioni: Parallel 1

Classificazione della track: Parallel session: Direct detection